CLAIMS:

1. A power converter provided with a voltage conversion circuit that receives an input voltage and converts the input voltage into an operating voltage to be used to drive an electric load, and with a detection circuit that detects an insulation resistance on the output side of the voltage conversion circuit, characterized by

a control circuit that determines a set value of the operating voltage and that sets the operating voltage at a time of degradation of the insulation resistance detected by the detection circuit lower than the operating voltage at a time of normal operation of the insulation resistance.

2. The power converter according to claim 1, characterized in that the control circuit sets the operating voltage in accordance with the detected insulation resistance so that the operating voltage remains below a controlled voltage determined by the insulation resistance.

3. The power converter according to claim 2, characterized in that the controlled voltage is expressed as a product of an inverse of a predetermined standard rate, which is indicated as a ratio of an insulation resistance to be ensured with respect to the operating voltage, and the detected insulation resistance.

4. The power converter according to claim 1, characterized in that:

the control circuit sets the operating voltage within such a range that an upper-limit value of the operating voltage is equal to a maximum voltage that can be output by the voltage conversion circuit, if the controlled voltage is higher than the maximum voltage,

the control circuit sets the operating voltage such that the operating voltage becomes equal to a minimum voltage that can be output by the voltage conversion circuit, if the controlled voltage is lower than the minimum voltage, and

the control circuit sets the operating voltage within such a range that the upper-

limit value of the operating voltage becomes equal to the upper-limit voltage, if the controlled voltage is higher than the minimum voltage and lower than the maximum voltage.

5. The power converter according to claim 4, characterized in that:

the voltage conversion circuit can boost the input voltage, and

the control circuit sets the operating voltage equal to the input voltage if the controlled voltage is lower than the input voltage.

6. The power converter according to any one of claims 1 to 5, characterized in that the voltage conversion circuit is provided with a non-insulated converter.

7. The power converter according to any one of claims 1 to 5, characterized in that the voltage conversion circuit is provided with an insulated converter that is constructed such that a transformer is provided between a power source and the electric load.

8. A vehicle having a direct-current power unit that supplies the input voltage as a direct-current voltage, the power converter according to any one of claims 1 to 5, and an alternating-current motor that is provided as the electric load and that can drive at least one wheel, characterized in that

the power converter is provided between the voltage conversion circuit and the alternating-current motor, and further includes an inverter that performs power conversion between the operating voltage and an alternating voltage for drivingly controlling the alternating-current motor.

9. The power converter according to claim 8, characterized in that the voltage conversion circuit can boost the input voltage.

10. The power converter according to claim 8 or 9, characterized in that the voltage

conversion circuit is provided with a non-insulated converter.

11. The power converter according to claim 8 or 9, characterized in that the voltage conversion circuit is provided with an insulated converter that is constructed such that a transformer is provided between a power source and the electric load.